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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,626	10/27/2003	William L. Courtney	10861.6804	2634

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EXAMINER
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RIVELL, JOHN A

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/694,626	<b>Applicant(s)</b> COURTNEY, WILLIAM L.	
	<b>Examiner</b> John Rivell	<b>Art Unit</b> 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/27/06 (election).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 23-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-18, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 6-8, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims 1-32 remain pending.

Applicant's election without traverse of the invention of Group I, claims 1-22 in the reply filed on March 27, 2006 is acknowledged.

Claims 22-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 27, 2006.

The drawings are objected to as generally failing the requirements of 37 CFR 1.84 as all drawing figures are required to be separately labeled. See for example 37 CFR 1.84(u).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) and 1.84 are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in

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the next Office action. The objection to the drawings will not be held in abeyance.

As the nature of separately labeling the multiple figures of the drawings will require additional numerous amendments to the specification, a substitute specification in compliance with 37 CFR 1.125 may be filed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9-13, 15 and 16 are rejected under 35 U.S.C. §102 (b) as being anticipated by Mackal.

The patent to Mackal discloses an "inflation/deflation valve, comprising: a valve body (generally designated 12) having an internal passageway (20) and a valve outlet end (on the left end to which is fluidly connected the supplied tube 11), said valve body (12) having a valve seat (wall surface 28 of flange 22) disposed within the internal passageway; a valve sleeve (inner hollow sleeve 17) having an outlet end (at the left end) disposed within the internal passageway of said valve body (12), said valve sleeve (17) having an internal passageway (30); a valve face (at seal element 26 held in groove 25 on the left end of valve tube 17) attached to said valve sleeve (17) at the perforated (by cross bore 31) outlet end of said valve sleeve (17), and a spring (24) having a spring tension and disposed within the internal passageway (20) of said valve body (12); said spring (24) maintaining said valve face (26) in an abutting relationship with said valve seat (at 28) unless a force greater than the spring (24) tension is applied

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to prevent gas (air) from flowing through the internal passageway (20) of said valve body (12)" as recited.

Regarding claim 9, in Mackal, "said valve sleeve (17 has) a pin member (either one of pins 37) and said valve body (12) having an internal groove (at groove 36); wherein when said pin member (37) is disposed within said internal groove (36) said valve face (at seal 26) is maintained in a non-abutting (open) position with respect to said valve seat (at 28) to permit gas (air) flow through the internal passageway (20) of said valve body (12)" as recited.

Regarding claim 10, in Mackal, "said valve sleeve (17 has) a pin member (either one of pins 37) and said valve body (12) having an internal groove (42); wherein when said pin member (37) is disposed within said internal groove (42) said valve face (at seal 26) is maintained in a abutting (closed) position with respect to said valve seat (at 28) to prevent gas (air) flow through the internal passageway (20) of said valve body (12)" as recited.

Regarding claim 11, in Mackal, "valve sleeve (17) having a ridge (21) disposed on an outer surface and said spring (24) is disposed between said valve seat (at the right facing surface of flange 22) and said ridge (21)" as recited.

Regarding claim 12, in Mackal, "said valve sleeve (17 has) a stop member (read on either pin 37) disposed on its outer surface to restrict inward movement of said valve sleeve (17) within the internal passageway (20) of said valve body (12) to a specific length" as recited.

Regarding claim 13, in Mackal, clearly includes "means for locking (at the cooperation of pin 37 and notch 42) said valve seat (at 28) and said valve face (at seal 26) in a closed sealed position" as recited.

Regarding claim 15, in Mackal, "the outlet end (on the left end) of said valve sleeve (17) is perforated" by cross bore 31 as recited.

Regarding claim 16, in Mackal, "said valve body (12 has) an outer surface having one or more barbs (at reference numeral 27 of figure 1) disposed on a portion thereof for securing the valve body (12) to a tubing (11)" as recited.

Claims 1, 11-13 and 15 are further, and claims 2, 3, and 14 are rejected under 35 U.S.C. §102 (b) as being anticipated by Henemier.

The patent to Henemier discloses an "inflation/deflation valve, comprising: a valve body (3) at having an internal passageway (the unreferenced central bore receiving valve stem 7) and a valve outlet end (at the lower end connected to inflatable object 2), said valve body (3) having a valve seat (at the lower end of body 3 forming the upper wall of cavity 15 on which seats the unreferenced seal element as shown in figure 2) disposed within the internal passageway; a valve sleeve (hollow stem 7) having an outlet end disposed within the internal passageway of said valve body, said valve sleeve (7) having an internal passageway (14); a valve face (at the upper facing surface of the seal element) attached to said valve sleeve (7 at the valve head 8) at the perforated outlet end of said valve sleeve, and a spring (10) having a spring tension and disposed within the internal passageway of said valve body; said spring (10) maintaining said valve face in an abutting relationship with said valve seat unless a

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force greater than the spring tension is applied to prevent gas (air) from flowing through the internal passageway of said valve body” as recited.

Regarding claim 2, in Henemier, “said valve sleeve (7 has) means (at the upper facing surface of nut 12 which will activate) a pneumatic supply (valve in an attached supply coupling half 16 when the supply coupling half 16 includes a valve device actuated by the act of coupling the supply coupling half 16 with the supplied coupling half shown in Henemier) for receiving gas within the internal passageway of said valve sleeve” as recited.

Regarding claim 3, in Henemier, “said valve sleeve (7 has) an outer surface which provides non-locking coupling of said valve sleeve (7) to said pneumatic supply (16)” such as in the sliding friction fit of the supply coupling 16 within the supplied coupling at 18 in Henemier.

Regarding claim 11, in Henemier, “said valve sleeve (7 has) a ridge (at 11 on the underside of nut 12) disposed on an outer surface and said spring (10) is disposed between said valve seat (at the upper end of body 3 opposite of the valve seat) and said ridge (11)” as recited.

Regarding claim 12, in Henemier, valve sleeve (7 has) a stop member (read on shoulder 11) disposed on its outer surface to restrict inward movement of said valve sleeve (7) within the internal passageway of said valve body to a specific length” as recited.

Regarding claim 13, in Henemier, "means for locking said valve seat and said valve face in a closed sealed position" is shown at the threaded connection of element 18 cooperating.

Regarding claim 14, in Henemier, "means for locking said valve seat and said valve face in an open non-sealed position" is shown at threaded sleeve 19. See figure 3 for example.

Regarding claim 15, in Henemier, "the outlet end of said valve sleeve (7) is perforated" to permit air flow when open.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henemier in view of Dudar.

The patent to Henemier discloses all the claimed features with the exception of having "said valve sleeve (have) an outer surface having a locking groove for receipt of one or more locking balls to provide for locked coupling of said valve sleeve to said pneumatic supply (claim 4) and in which "said means for activating is an actuating bridge disposed at an exposed inlet end of said valve sleeve" (claim 5).

The patent to Dudar discloses that it is known in the art to employ an inflation coupling device including a coupling male half receiving the supply female coupling half which male half includes a "locking groove" at 20 for receipt of "one or more balls" of the female half coupling, and in which the male coupling includes a "bridge" at 34 actuating the supply valve in the female half upon coupling for the purpose of controlling the flow



of fluid between halves of a male female type coupling lockable together, which control is effected upon complete coupling.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Henemier a male/female type inlet coupling lockable together and including a "bridge" to actuate the valve in the female coupling half upon complete coupling for the purpose of controlling the flow of fluid between halves of a male female type coupling lockable together, which control is effected upon complete coupling as recognized by Dudar.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henemier in view of Krier.

The patent to Henemier discloses all the claimed features with the exception of having "a weldable flange attached to said valve body for attaching said valve body to an inflatable object".

The patent to Krier discloses that it is known in the art to employ "a weldable flange attached to said valve body" at flange 34 ultrasonically welded to the inflatable bladder for the purpose of fixedly attaching said valve body to an inflatable object.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Henemier a "weldable flange attached to the valve body" for the purpose of fixedly attaching said valve body to an inflatable object, as recognized by Krier.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henemier in view of Nitta.

The patent to Henemier discloses all the claimed features with the exception of having "an o-ring disposed on said valve sleeve for providing a sealed relationship between said valve sleeve and a coupled pneumatic supply".

The patent to Nitta discloses that it is known in the art to employ an "O-ring" at seal 22 for the purpose of "providing a sealed relationship between said valve sleeve and a coupled...supply".

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Henemier an "O-ring" attached to the inlet end of sleeve 7 for the purpose of providing a sealed relationship between said valve sleeve and a coupled pneumatic supply as recognized by Nitta.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henemier in view of Krier as applied to claim 17 above, further in view of Tuan.

The patent to Henemier, as modified by Krier, discloses all the claimed features with the exception of having "an overpressure relief valve having a relief valve body..." and "wherein said valve body and said relief valve body share a common wall such that the inflation/deflation valve and the overpressure relief valve are in a side-by-side relationship"

The patent to Tuan discloses that it is known in the art to employ, in an inflation stem "an overpressure relief valve (at ball 322) having a relief valve body (and) "wherein said valve body (inflation valve 312) and said relief valve body (322) share a common wall (within element 3) such that the inflation/deflation valve and the overpressure relief valve are in a side-by-side relationship" for the purpose of permitting automatic control of inflation by permitting overpressure release through the relief valve element.


It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Henemier side by side inflation and overpressure relief valves for the purpose of permitting automatic control of inflation by permitting overpressure release through the relief valve element as recognized by Tuan.

Claims 6-8, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**John Rivell**  
**Primary Examiner**  
**Art Unit 3753**

j.r.